2010 Annual Report

BRITISH COLUMBIA

Ministry of Public Safety and Solicitor General
Police Services Division

Road Safety Enhanced Enforcement Program

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I am pleased to present the 2010 Road Safety Enhanced Enforcement Annual Report. 2010 was a significant year for road safety in British Columbia. Early in the year, government passed distracted driving legislation banning the use of hand held devices, such as cell phones, while driving. Two additional pieces of legislation were passed in September: Immediate Roadside Prohibitions provided police with discretionary use of administrative sanctions that supplement existing criminal code impaired driving interventions; and excessive speeding/stunting legislation introduced provisions for vehicle impoundment. Police are now equipped with more effective enforcement options to address some of the most dangerous driving behaviours on our roads.

Enhanced traffic enforcement officers also provided additional security and enforcement for the 2010 Vancouver Winter Olympic Games in February. Their deployment to Olympic-related activities helped ensure a safe and successful event; it also resulted in a decline in traffic enforcement and violation outputs during the first half of 2010. In April, I wrote to communities to announce which intersection sites will be included in the 2011 Intersection Safety Camera Program upgrade; and in December, the year closed with the training of Intersection Safety Camera Officers to join an exclusive group of Special Constables in the Ministry who are certified as prosecutors. These initiatives reinforce our commitment to partnerships and ability to embrace new challenges. Further, these qualities also demonstrate why Police Services Road Safety Unit is now a two-time recipient of the Lower Mainland Premier's Award for Partnership and Service Excellence (2009 and 2010).

In 2011, we will continue to raise the bar on road safety targets. The province remains committed to reducing drinking-driving fatalities by 35% by the end of 2013 and the police community continues to respond by making this an operational priority. Ongoing road safety advancements will be made through research and evaluations of programs such as Automatic Licence Plate Recognition (ALPR), improvements to legislation and regulations, and by embracing technology that supports effective and efficient use of resources.

As incoming Assistant Deputy Minister and Director of Police Services, I would like to acknowledge the many years of leadership and dedication that Assistant Deputy Minister Kevin Begg brought to this portfolio; his experience, in-depth knowledge and big-picture approach are well-known and highly respected throughout government and the community at large.

I look forward to collaborating with the road safety community and building on the successes to date. Through constructive partnerships, innovation and dedicated resources, we continue to strengthen our commitment to saving lives and reducing injuries, while making British Columbia's roads the safest in Canada.

Clayton J. D. Pecknold

Assistant Deputy Minister and
Director of Police Services
Policing and Security Programs Branch

Program: Road Safety Unit (RSU)

Mandate: To deliver the enhanced traffic enforcement program.

Program Description: The RSU has administrative oversight of the enhanced traffic enforcement program. The purpose of the program is to reduce traffic fatalities and serious injuries, reduce auto crime, and increase public awareness of traffic enforcement. The enhanced traffic enforcement program was established through the *Traffic and Road Safety Law Enforcement Memorandum of Understanding* between the Ministry of Public Safety and Solicitor General and the Insurance Corporation of British Columbia (ICBC). In addition to this partnership, the RSU works with other agencies in the road safety community which include (but are not limited to) the federal, provincial and municipal governments, the RCMP and independent municipal police departments. Listed below are the three main functions that the RSU provides in delivering the enhanced traffic enforcement program.

Programs and Policy

- Deliver the enhanced traffic enforcement program
- Manage the enforcement operations of the ISC program
- Conduct evaluations and assume accountability for performance measures
- Provide program policy and strategic direction
- Conduct enforcement data analysis and road safety research to identify program priorities
- Conduct Public Attitude Surveys to assess driver attitudes about road safety in British Columbia

Partnerships

- Provide Secretariat support to the British Columbia Association of Chiefs of Police, Traffic Safety Committee
- Coordinate and carry out the direction of the Road Safety Advisory Committee and the Integrated Municipal Provincial Auto Crime Team Policy Board
- Fund and collaborate on enhanced enforcement road safety public information campaigns
- Consult and collaborate on road safety committees/working groups

Financial and Training

- Financial oversight of the enhanced traffic enforcement program
- Financial support for municipal police officers to attend advanced traffic training

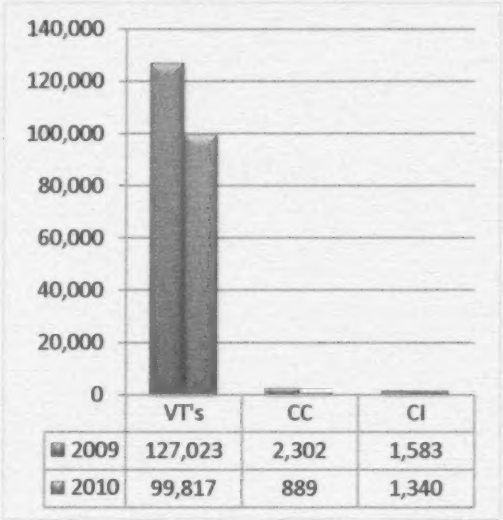
Program: Enhanced Enforcement

Mandate: To augment regular police traffic enforcement to reduce fatalities and serious injuries caused by motor vehicle collisions.

Program Description: The Enhanced Enforcement program ("the program") includes the Integrated Road Safety Units (IRSU), overtime activity for the IRSU's (IRSU OT), CounterAttack (CA) campaigns and the RCMP's Enhanced Road Safety Enforcement Initiative (ERSEI). IRSU's are made up of both RCMP and independent municipal police officers and are located throughout the province. IRSU officers focus solely on targeting dangerous driving behaviours that contribute to serious injury and fatality collisions. IRSU OT, ERSEI, and CA campaigns support special or seasonal enforcement priorities. The graph below shows the Criminal Code (CC) charges laid and violation tickets (VT) issued by the program, as well as criminal interdiction (CI) activity. The pie chart below shows the estimated revenue generated by enhanced enforcement VT's, which is only a portion of the overall provincial total.

Total Enhanced Enforcement Output[1,2]

- 21% decrease in VTs issued[3]
- 61% decrease in CC charges[4]
- 15% decrease in CI activity[5]



Estimated Enhanced Enforcement Violation Ticket Revenue[6]

- 21% decrease in estimated VT[7] revenue[8] for the program

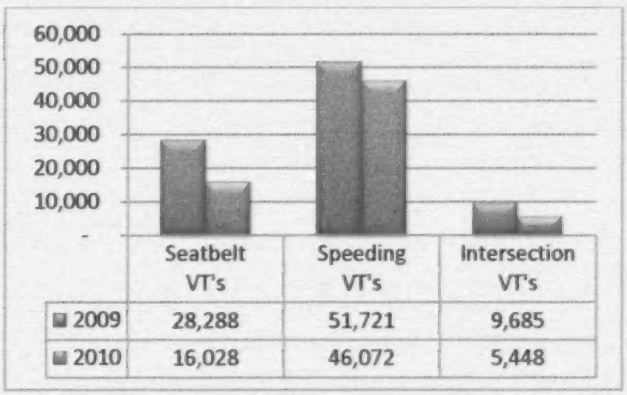
Discussion:

- During the first quarter of 2010 (January to March), significant police resources were focused on the Olympics and the G8/G20 Summits in Ontario, resulting in decreased traffic output.
- We anticipate a return to full compliment in 2011 after deferred officer vacation, training and other leave has been accounted for.
- More people using public transit and working from home during the Olympics resulted in fewer vehicles on the roads.

Program Priorities: The program targets specific dangerous driving behaviours that contribute to fatalities and serious injuries. The program priorities for 2010 included seatbelts, speeding, intersections, impaired driving, and distracted driving (which as of January 2010 includes hand-held electronic devices such as cell phones). The two graphs below show VTs and sanctions issued in the priority enforcement areas of seatbelts, speeding, intersections and impaired driving.

Priority Enforcement Areas
Violation Ticket Output[9]

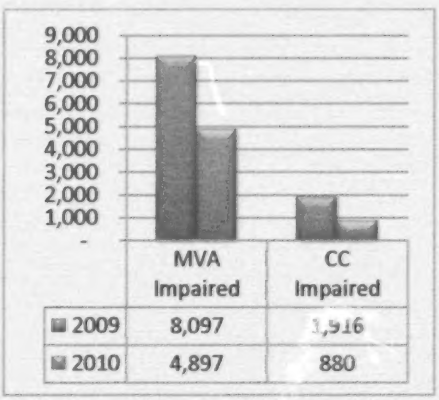
- 43% decrease in seatbelt VTs issued
- 11% decrease in speeding VTs issued
- 44% decrease in intersection VTs issued



	Seatbelt VT's	Speeding VT's	Intersection VT's
2009	28,288	51,721	9,685
2010	16,028	46,072	5,448

Impaired Related[10] **Activity:**
Motor Vehicle Act[11] **Sanctions/Criminal Code**[12] **Charges**

- 40% decrease in MVA impaired sanctions issued
- 54% decrease in CC impaired charges laid

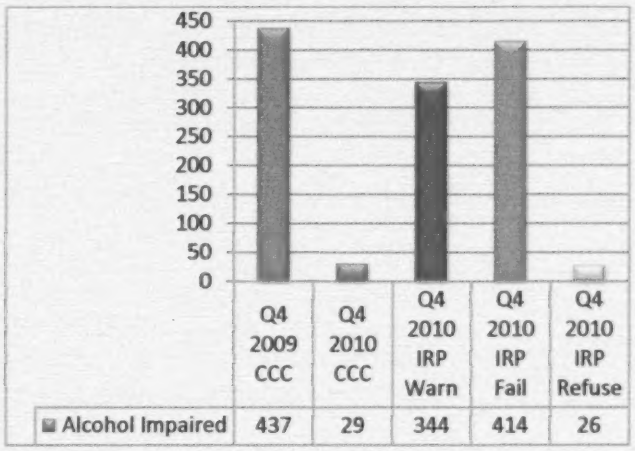


	MVA Impaired	CC Impaired
2009	8,097	1,916
2010	4,897	880

Legislation passed in 2010 focused on two specific enforcement priority areas: impaired driving and distracted driving. Preliminary data on Immediate Roadside Prohibitions (IRP) suggests that this legislation is changing and enhancing the way that police are enforcing impaired driving. The traditional option of laying a Criminal Code impaired charge is now complemented by the option to issue an immediate sanction at the roadside. The IRP sanction was increasingly issued during the fourth quarter of 2010.

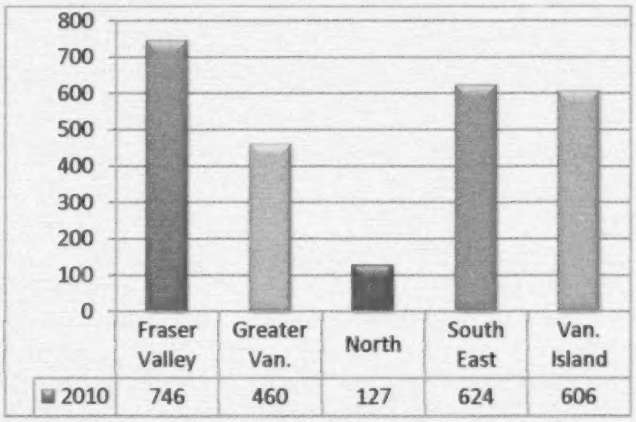
Criminal Code Impaired[13] Charges/ Immediate Roadside Prohibition Sanctions[14]

- 93% decrease in CC alcohol impaired charges from Q4 2009 to Q4 2010
- 44% of IRP's issued by the program were in the 'warn' range (blood alcohol content of 0.05% – 0.08%)
- 53% of IRP's issued by the program were in the 'fail' range (blood alcohol content over 0.08%).
- 3% of IRPs issued by the program were in the 'refuse' category



Distracted[15] Driving/Electronic Device Violation Ticket Output[16]

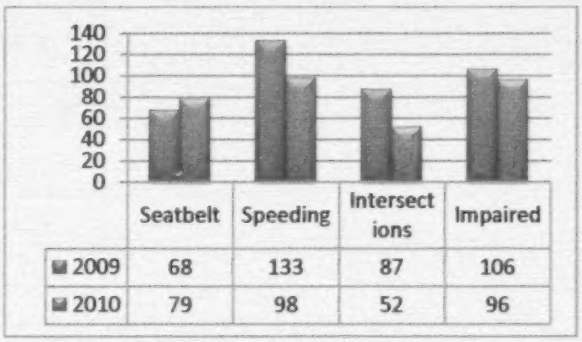
- Distracted driving legislation came into effect in January 2010
- Police engaged in a one-month public education campaign and issued warnings prior to engaging formal enforcement
- IRSU units issued over 2,500 distracted driving violation tickets in 2010



The following two graphs[17] show fatality and injury trends for victims[18] of collisions related to seatbelts[19], speeding[20], intersections[21] and impaired driving[22]. These graphs also demonstrate why these areas continue to be an enforcement priority for road safety.

Priority Enforcement Areas: Fatal Victims

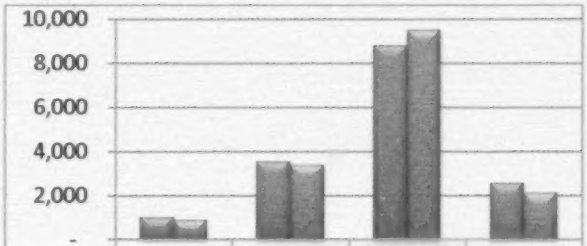
- 16% increase in seatbelt related fatalities (+ 11 people)
- 26% decrease in speed related fatalities (- 35 people)
- 40% decrease in intersection related fatalities (- 35 people)
- 9% decrease in impaired related fatalities (- 10 people)



	Seatbelt	Speeding	Intersections	Impaired
2009	68	133	87	106
2010	79	98	52	96

Priority Enforcement Areas: Injured Victims

- 12% decrease in seatbelt related injuries (- 123 people)
- 5% decrease in speed related injuries (- 161 people)
- 8% increase in intersection related injuries (+ 715 people)
- 17% decrease in impaired related injuries (- 445 people)



	Seatbelt	Speeding	Intersections	Impaired
2009	1,019	3,544	8,806	2,563
2010	896	3,383	9,521	2,118

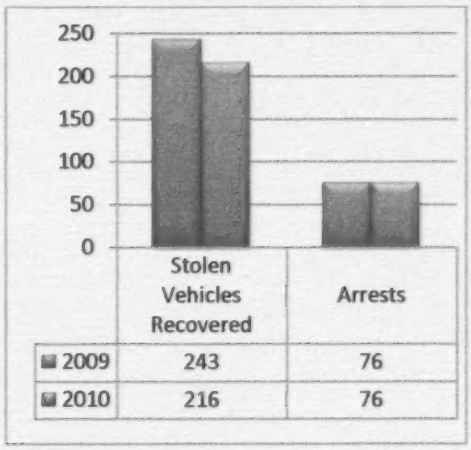
Program: IMPACT/BaitCar

Mandate: To develop and implement innovative strategies to reduce auto crime in British Columbia.

Program Description: The Integrated Municipal Provincial Auto Crime Team (IMPACT) is an enhanced enforcement initiative. IMPACT is dedicated to reducing the incidence of auto crime throughout British Columbia. IMPACT operates and manages several programs including BaitCar. BaitCars are vehicles that are owned by the police and are planted in areas with high incidences of auto theft. After a BaitCar has been stolen, the GPS technology in the vehicle allows dispatchers to direct the police to the vehicle's location so that an arrest can be made. The output trends in the IMPACT and BaitCar graphs below[23] show the same decreasing pattern of auto crime and auto theft in British Columbia, which has dropped 65% from 2004 to 2010 inclusive.

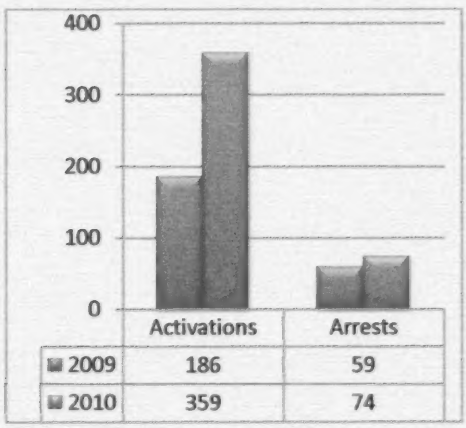
Enforcement Team Output

- 11% decrease in stolen vehicles recovered



BaitCar Output

- 93% increase in activations[24]
- 25% increase in arrests



Discussion:

- The Olympics coincided with "Auto Crime Enforcement Month" with the theme "Securing the Best Winter Games Ever".
- During the Olympics, auto crime enforcement monitored 255,000 parking spots over 17 days and planted BaitCars at public transit hubs and park-and-rides.
- Five cars were stolen – one was a BaitCar and resulted in two people being arrested and charged.
- Eight vehicles were stolen from, and two of these were BaitCars.
- This represents a victimization rate of less than 1%.

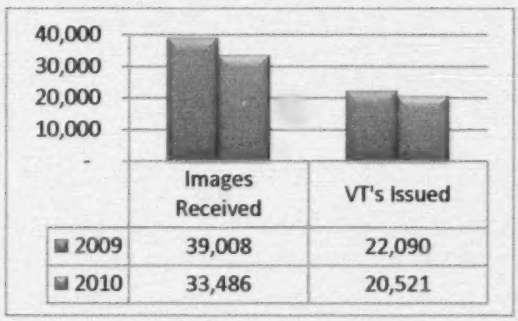
Program: Intersection Safety Camera (ISC)

Mandate: To reduce the number and severity of intersection related traffic collisions by issuing red light camera violation tickets.

Program Description: The ISC program is a partnership between the province, ICBC and the RCMP. When the upgrade is complete, there will be 140 digital cameras located at British Columbia's highest risk intersections. The ISC office is located in Richmond and consists of seven Intersection Safety Camera Officers (ISCO's). The ISCO's are responsible for reviewing photos taken by the cameras, laying a charge according to the *Motor Vehicle Act* legislation, and prosecuting disputed violation tickets in court. The ISC program underwent two significant changes in 2010: preparing for a digital upgrade and expansion of intersection safety cameras from 120 to 140 sites in 2011; and the training of ISCO's to prosecute disputed red light violation tickets in court.

ISC Operating Statistics[25]

- 14% decrease in images received
- 7% decrease in violation tickets issued



	Images Received	VT's Issued
2009	39,008	22,090
2010	33,486	20,521

Discussion:

- The old ISC sites that were not included in the upgraded program were removed during 2010. This affected the levels of active enforcement mode for the cameras and contributed to the decreased number of images received.
- The number of violation images received has steadily decreased in recent years. This may be due to a number of factors, including increased driver awareness and behavioural change since the program became operational in 1999.

Automated Enforcement Tool:

Automatic Licence Plate Recognition (ALPR)

Mandate: To reduce auto theft and motor vehicle violations related to prohibited, suspended, unlicensed and uninsured drivers. ALPR also assists with recovering stolen vehicles and stolen property, and detecting Amber Alerts issued for missing children.

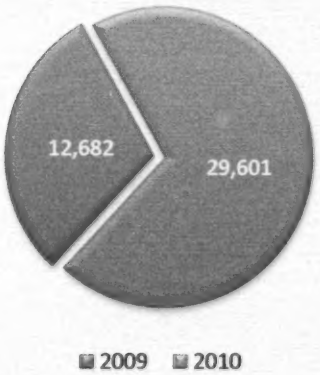
Program Description: ALPR was piloted in British Columbia by IMPACT and is now delivered through the enhanced enforcement program. The ALPR unit uses a camera to compare licence plates with information stored in police databases. An audible alert sounds when ALPR registers a 'hit'. The 'hit' informs police of outstanding violations, warrants, and prohibitions associated with the scanned licence plate. By the end of 2010, there were 25 ALPR units deployed in British Columbia through IMPACT (1), RCMP Traffic Services (7), and IRSU patrol vehicles (17).

IRSU ALPR Licence Plates Scanned

- 92% increase in licence plates scanned by ALPR in IRSU vehicles

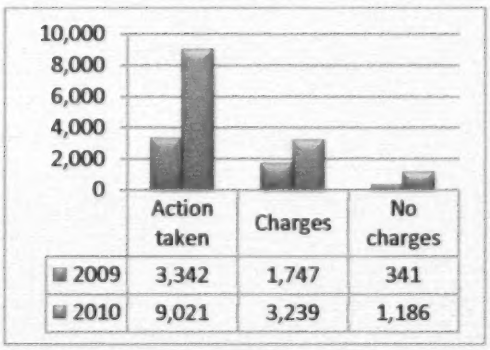
IRSU ALPR Hits

- 133% increase in 'hits' scanned by ALPR in IRSU vehicles



IRSU ALPR Activity[26]

ALPR activity (chart to the right) increased in 2010 because more ALPR units were deployed and they were also used more consistently than in 2009.



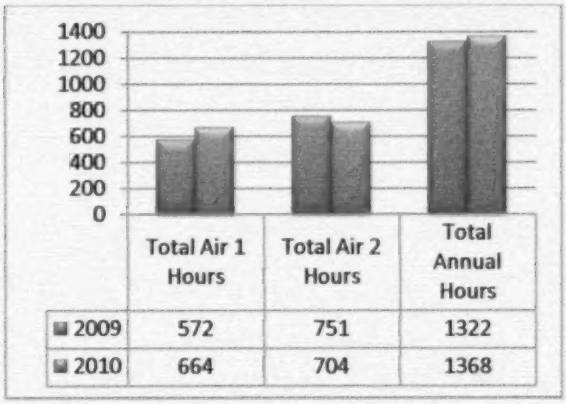
Automated Enforcement Tool:
Traffic Safety Helicopters (TSH)

Mandate: The TSHs support regular and enhanced traffic units to reduce injuries and deaths by targeting enforcement priority areas. They also provide enforcement support for patrol vehicles responding to other types of public safety emergencies.

Description: British Columbia has two dedicated TSHs: Air 1 and Air 2. The TSHs were purchased in 2004 (Air 1) and 2009 (Air 2) through a partnership between the RCMP, ICBC and the province. The TSHs are based out of the South Terminal and serve over 17 communities in the Lower Mainland. The TSHs assist in locating and monitoring suspects and vehicles that have fled from ground units. TSHs also assist with investigating and detecting stolen vehicles and dangerous driving behaviours such as street racing, aggressive driving, and impaired driving.

TSH Hours of Operation[27]

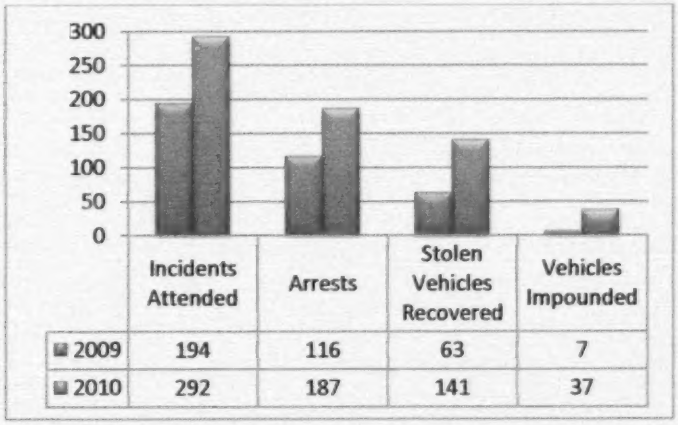
- 3% increase in total annual TSH hours



	Total Air 1 Hours	Total Air 2 Hours	Total Annual Hours
2009	572	751	1322
2010	664	704	1368

TSH Traffic Related Activity[28]

- Substantial increases ranging from 51% to 429% occurred in the TSH activity categories[29] presented to the right.



	Incidents Attended	Arrests	Stolen Vehicles Recovered	Vehicles Impounded
2009	194	116	63	7
2010	292	187	141	37

Service: Justice Institute of British Columbia (JIBC)

Description: The RSU provides funding to the JIBC principally for municipal police officers to receive specialized traffic-related training. During 2010, over 100 officers attended advanced traffic training courses. The chart below shows the courses that were funded in 2010.

Course	Date	Participants	Location
BAC Datamaster C Certificate Course	April 12 – 16	24	JIBC Vancouver Campus
Drug Recognition Expert	April 19 – 30	22	JIBC New Westminster Campus
Basic Collision Investigation	May 17 – 21	8	JIBC New Westminster Campus
BAC Datamaster C Certificate Course	September 13 – 17	22	JIBC Vancouver Campus
BAC Datamaster C Certificate Course	October 4 – 8	19	Victoria
Basic Collision Investigation	November 15 – 19	11	New Westminster

Service: B.C. Association of Chiefs of Police Traffic Safety Committee (BCACP TSC)

Description: The RSU provides funding and secretariat support for the executive and general meetings of the BCACP TSC. The BCACP TSC general membership meets twice a year and is attended by the police and various members of the road safety community. In 2010, Chief Constable Jamie Graham from the Victoria Police Department was the Chair and Superintendent Mike Diack from "E" Division Traffic Services of the RCMP was the Vice-Chair. As the Secretariat of the BCACP TSC, the RSU has an additional responsibility in ensuring the success of the provincial enforcement campaigns adopted by BCACP. The 2010 Provincial Enforcement Campaign Schedule is outlined below according to season.

Summer	May 1 – 31	High Risk Driving Campaign
	May 21 – 24 (National)	Canada Road Safety Week
	July 1 – 31	Alcohol/Drug Campaign: Impaired Driving Enforcement
Fall	September 1 – 30	Occupant Restraint Campaign
	October 8 – 11 (National)	Operation Impact
Winter	November 1 – 30	Speed Enforcement Campaign: Speed Relative To Conditions
	December 1, 2010 – January 1, 2011	Alcohol/Drug Campaign: Christmas Enforcement Campaign

Accountability: Public Awareness and Education

Description: Each year, $600,000 of the MOU funding is dedicated towards enhanced enforcement public education and awareness. Additional activities in 2010 allowed the RSU to gain insight into the public's level of awareness related to road safety issues and legislation, fund studies that investigate priority road safety issues, and have a road safety presence at community events. The examples below highlight the RSU's participation in public awareness and education.

Public Attitude Survey

- The Public Attitude Survey (PAS) has been conducted since 2006 and asks questions related to police commitment, legislation, driving behaviour and traffic enforcement.
- In 2010, 950 people were randomly surveyed over the phone to provide their opinions.
- 95% of the respondents knew about the new law requiring drivers to 'slow down and move over' when emergency vehicles are at the side of the road.
- Police and public seem to share similar areas of concern about enforcement priorities and dangerous driving behaviour.

Night-time Impaired Driving Survey

- The RSU and other road safety partners funded a study conducted by the Canadian Center for Substance Abuse.
- The study was conducted in November 2010 and looked at impaired drivers in five cities across British Columbia.
- The findings note that alcohol use among drivers was most common on weekends and during late-night hours; drug use was more evenly distributed across all survey nights and times.
- The findings also suggest that there is room for improvement in terms of public awareness, but that the public supports strong measures in dealing with impaired driving.

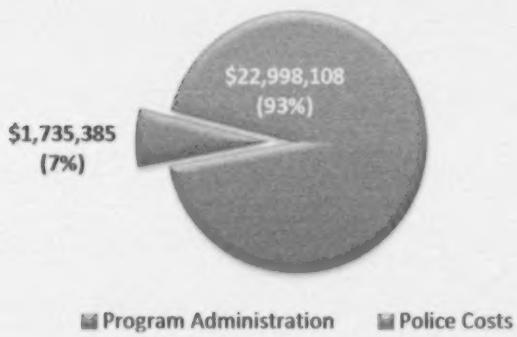
Vancouver Motorcycle Show 2010

- The Vancouver Motorcycle Show attracts motorcycle enthusiasts, vendors and road safety partners from across British Columbia.
- A display was set up featuring safety pamphlets and program information from the RCMP, BCAA, ICBC, OSMV and RSU.
- Representatives from these and other police agencies were at the display to engage the public in conversations about motorcycle safety and answer questions.
- Police motorcycles, pencils and stickers were very popular with children, and helped raise awareness in a fun and subtle way with this young audience and their families.

Accountability: Financial Overview

Description: The enhanced traffic enforcement program operates using fenced funding provided by ICBC (as stated in the *Traffic and Road Safety Law Enforcement Funding Memorandum of Understanding*). In 2010, the program received funding based on 1.25% of basic insurance premiums earned during 2008. The program received $25,595,437.50 from ICBC for the 2010 calendar year. However, the program operates based on a fiscal year, so the program received $25,637,996 for 2010/11 (April 2010 – March 2011). The 2010/11 fiscal year operating budget is presented below.

Program Administration	
Road Safety Initiative - Contracts	$820,423
BCACP TSC Secretariat Support	$151,500
ISC Administration and Operations	$688,462
Police Training	$75,000
Subtotal at 100%	**$1,735,385**
Police Costs	
Traffic Safety Initiative – 180.5 FTEs	$19,384,282
42 additional FTEs	$3,613,826
IMPACT (included in TSI costs)	-
BaitCar (included in TSI costs)	-
Police expenditures at 70%	**$22,998,108**
TOTAL Program expenditures	**$24,733,493**
Gross 09/10 Budget at 1.25%	$25,595,436
Less ICBC Advertising Holdback	- $600,000
Less ICBC Holdback for ISC Office BOC	- $261,943
Net ICBC Budget	$24,733,493
TOTAL NET BUDGET AVAILABLE	**$24,733,493**
Total Program Expenditures	$24,733,493
Surplus/Deficit	$0



Endnotes

[1] ERSEI program funding was substantially reduced in 2010 which likely contributed to the decrease in outputs from 2009.
[2] Criminal Code, Violation Tickets and Criminal Interdiction Outputs: IRSU, IRSU_OT and ERSEI data were obtained from the "2005-2010 EE Total Stats" spreadsheet and "Baseline Stats_January to December 2010" spreadsheet. All CounterAttack data was compiled from "Summer 2009 and Winter 2009/10 Data" and "Summer 2010 and Winter 2010/11 Data" spreadsheets. Note: Enhanced enforcement data updated as of September 2, 2011 was used to ensure the most accurate figures were included for IRSU and IRSU_OT outputs.
[3] "Violation Ticket" categories include: Intersection, Seatbelts, Speed, Commercial Vehicles, Vehicle Defect, Other Moving, Other Non-Moving, Other Tickets (2009 and 2010).
[4] "Criminal Code" categories include: Alcohol Impaired, Drugs Impaired, Other Criminal Code, and Refusal to Provide Sample.
[5] "Criminal Interdiction" refers to incidences when an officer stops a ve' :le for an MVA related infraction, and upon further investigation has grounds for detaining an individual due to potential cr 'inal charges. Criminal interdiction figures are reported out separately because they are combination of MVA and CC .elated enforcement activity (and therefore don't belong exclusively to either category).
[6] Violation Tickets: IRSU, IRSU_OT and ERSEI data were obtained from the "2005-2010 EE Total Stats" spreadsheet and "Baseline Stats_January to December 2010" spreadsheet. Note: Enhanced enforcement data updated as of September 2, 2011 was used to ensure the most accurate figures were included for IRSU and IRSU_OT outputs.
[7] "Relevant MVA Violation Ticket" categories include: Intersection, Seatbelts, Speed, Commercial Vehicles, Vehicle Defect, Other Moving, Other Non-Moving, Other Tickets (2009 and 2010).
[8] The average traffic fine amount was estimated at $107.84 based on the published calculation referenced from "Fraser Valley IRSU Evaluation (2008)". This figure was particularly helpful in calculating TFR for 2009 and 2010 because the Strategic Community Investment Fund introduced in 2008 resulted in disproportionate traffic fine revenue allotments for 2008 - 2010, which would have resulted in skewed calculations of annual average traffic fine amount (using the formula TFR total/total VT's issued).
[9] 2009 violation ticket output for IRSU, IRSU_OT and ERSEI was taken from the "2005-2010 EE Total Stats" spreadsheet. 2010 violation ticket output for IRSU, IRSU_OT and ERSEI was taken from "Baseline Stats_January to December 2010" spreadsheet. (CounterAttack data wasn't included in this category because the campaign focuses on impaired driving and does not target the other priority areas). Note: Enhanced enforcement data updated as of September 2, 2011 was used to ensure the most accurate figures were included for IRSU and IRSU_OT outputs.
[10] 2009 output for IRSU, IRSU_OT and ERSEI was taken from the "2005-2010 EE Total Stats" spreadsheet. 2010 output for IRSU and IRSU_OT was taken from "Baseline Stats_January to December 2010" spreadsheet. 2010 output for ERSEI was taken from "ERSEI_Construction Zones_January to December 2010" spreadsheet. All CounterAttack data was compiled from "Summer 2009 and Winter 2009/10 Data" and "Summer 2010 and Winter 2010/11 Data" spreadsheets. Note: Enhanced enforcement data updated as of September 2, 2011 was used to ensure the most accurate figures were included for IRSU and IRSU_OT outputs.
[11] Motor Vehicle Act = Alcohol 24 Hours, Alcohol ADP, Drugs 24 Hours (2009) and IRP's (2010).
[12] Criminal Code = Alcohol Impaired, Drugs Impaired, and Refusal to Provide Sample.
[13] Q4 2009 CCC (alcohol) IRSU and IRSU_OT data came from "BASELINE Q4 2009 Updated" spreadsheet. Q4 2009 CCC (alcohol) ERSEI data came from "ERSEI Q4 2009" spreadsheet. There was no ERSEI activity for Q4 2010 and CounterAttack data was not included in the 'alcohol impaired' figures since the campaigns only record 'impaired' charges but do not distinguish whether the impairment is alcohol or drug related. Note: Enhanced enforcement data updated as of September 2, 2011 was used to ensure the most accurate figures were included for IRSU and IRSU_OT outputs.
[14] IRP violation ticket data for IRSU and IRSU_OT came from "Q4 EE Statistics Report for ICBC". Note: Enhanced enforcement data updated as of September 2, 2011 was used to ensure the most accurate figures were included for IRSU and IRSU_OT outputs.
[15] "MVA Distraction Offences" include: MVA 214.2(1) - Use an electronic device while driving, MVA 214.2(2) - Emailing or texting while driving, MVA 25.15 - Driving contrary to restriction/Driving contrary to restriction – use of electronic device (applicable to GLP drivers only).
[16] IRSU data for distracted driving/electronic device violation tickets was taken from "4-Contraventions W IRSU_2010 Q4" spreadsheet from ICBC. This data reflects distracted driving violation tickets issued by IRSU's from February 2010 (when the laws came into effect) to December 2010. Due to limited preliminary data, the data for this enforcement area was presented by region.
[17] Data retrieved from "2 – TAS data by ICBC Regions_2011 Q1" spreadsheet published by ICBC's Business Information Warehouse. Data is current as of March 31, 2011.In 2008, legislation changed so that police are no longer required to attend all crashes and attendance is at their discretion. Consequently, there has been a marked decrease in the number of police-attended reports submitted to ICBC. Therefore, it is cautioned that decreasing crash counts which include police-reported data may be misleading.
[18] "Victims" refers to drivers, passengers, pedestrian and cyclists.
[19] "Seatbelt" refers to unbelted victims.
[20] "Speed" refers to victims of speed-related crashes. The Business Information Warehouse defined "speed related crashes" as "incidents where one or more of the vehicles had contributing factors: Unsafe Speed (31), Exceeding Speed Limit (35), Excessive Speed over 40 km/h (36), Driving too fast for Conditions (37)".
[21] "Intersection" refers to victims of crashes at intersections.

[22] The Business Information Warehouse defines "Impaired related crashes" as "incidents where one or more of the vehicles had contributing factors: Alcohol Involvement (10), Ability Impaired by Alcohol (80), Alcohol Suspected (81), Drugs Illegal (15), Ability Impaired by Drugs (82), Drugs Suspected (83), Ability Impaired by Medication (84)".
[23] Data retrieved from IMPACT 2009 Annual Report and IMPACT 2010 Annual Report (Statistical Components).
[24] "BaitCar activations" figures include unknown citizens and suspects.
[25] Number of ISC images and violation tickets came from "ISC Operating Stats 1999 to 2010" spreadsheet.
[26] Data for all three graphs on this page was retrieved from 2009 data taken from "2010 Statistics" for ALPR. 2010 data was taken from RSU ALPR presentation at March 2011 BCACP TSC General Membership Meeting.
[27] Data for Traffic Safety Helicopter hours of operation (2009 and 2010) was taken from "Helicopter hours by quarter and aircraft" spreadsheet.
[28]Traffic Safety Helicopter activity data was taken from "Air 1 and 2 2009 Quarterly Reports - Cumulative" spreadsheet and "Lower Mainland Traffic Safety Helicopter 2010 Report".
[29] Data from the "CC Flight" category wasn't used because the policy has changed from "pursuits" to "flight". "Incidents" weren't listed for Impaired Driving. Stolen stats for "Vehicles recovered" and "Vehicles Impounded" were used from the categories attended by TSH's: street racing, aggressive driving, stolen vehicles, dangerous driving and impaired drivers.